

**From:** [Maria Martinez](#)  
**To:** [R6\\_DWH\\_Info@epa.gov](mailto:R6_DWH_Info@epa.gov)  
**Subject:** Fw: Potential air impacts of concern from Deepwater Horizon oil spill  
**Date:** 05/31/2010 01:50 PM

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----- Forwarded by Maria Martinez/R6/USEPA/US on 05/31/2010 01:50 PM -----

Re: Fw: Potential air impacts of concern from Deepwater Horizon oil spill [Link](#)

Maria Martinez

to: Carl Edlund

04/30/2010 08:58 AM

Cc: "Bill Luthans", "William Rhea", "Susan Spalding", Thomas Diggs, "Steve Vargo"

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Carl,

I talked to Mike Vince yesterday evening and he says they are getting complaints. Most of these in his opinion are odor driven, however, the aerosol effect may play a part in the next few days as the oil sheen approaches land.

The TAGA is a good idea...they are planning Tedlar bag grab samples for VOC analysis. The VOC sampling being done on land by Superfund's contractor are 8 hour samples with 24-hour turnaround on the analysis. Additionally, the LDEQ Kenner and Chalmette Vista sites which are more inland will have 8-hour VOC trigger samples with 24-hour turnaround analysis. 24-hour composite samples for VOCs are also planned for the Kenner and Chalmette Vista sites.

AIRNOW, the real-time public air quality information system, will get the results from LDEQ's continuous PM data at their stationary sites. OAQPS recommended that the other data being generated also be put on AIRNOW but I understand that the communications plan on that data is being generated by HQ's as we speak.

I think the biggest issue is that we don't have screening levels or human health comparison tools to explain the potential impacts of the aerosol scenario. LDHH is already being brought into the issue on the water issues. Let me see what we can do on the air side of the house on evaluating the health impacts of the aerosol scenario. I'll keep you posted.

Maria

From: Carl Edlund/R6/USEPA/US

To: "Maria Martinez" <Martinez.Maria@epamail.epa.gov>  
Cc: "William Rhea" <Rhea.William@epamail.epa.gov>, "Bill Luthans" <luthans.william@epa.gov>, Thomas Diggs/R6/USEPA/US@EPA, "Steve Vargo" <vargo.steve@epa.gov>, "Susan Spalding" <spalding.susan@epa.gov>  
Date: 04/30/2010 08:27 AM  
Subject: Fw: Potential air impacts of concern from Deepwater Horizon oil spill

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What do you think?

Sent by EPA Wireless E-Mail Services

----- Original Message -----

**From:** Richard Wayland  
**Sent:** 04/30/2010 08:34 AM EDT  
**To:** Tim Hanley; Phil Lorang; Craig Carroll; Sam Coleman; Carol Kemker; Carl Edlund  
**Subject:** Fw: Potential air impacts of concern from Deepwater Horizon oil spill

Hi folks,

See the email below from Stan. I assume the TAGA bus can handle some of these VOC measurements and is mobile so it could be moved around. Are there other considerations for VOC monitoring that we need to consider in light of more concern with oil spray and maybe less on the burn side? I'm sure folks on the ground are working this as well, but just wanted to raise as I'm sure we'll get asked specific questions from the Admin office. Any suggestions or input you have related to this would be helpful so we can respond to the folks in DC.

Thanks,  
Chet

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Richard A. "Chet" Wayland  
Director, Air Quality Assessment Division  
U.S. EPA Office of Air Quality Planning & Standards  
(919) 541-4603

----- Forwarded by Richard Wayland/RTP/USEPA/US on 04/30/2010 08:16 AM -----

**From:** Gina McCarthy/DC/USEPA/US  
**To:** "Steve Page" <Page.Steve@Epa.GOV>, "Chet Wayland" <Wayland.Richard@EPA.GOV>, "Lydia Wegman" <Wegman.Lydia@EPA.GOV>  
**Cc:** "Alan Rush" <rush.alan@epa.gov>  
**Date:** 04/30/2010 07:29 AM  
**Subject:** Fw: Potential air impacts of concern from Deepwater Horizon oil spill

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For your prompt consideration.

----- Original Message -----

**From:** Stan Meiburg  
**Sent:** 04/30/2010 01:11 AM EDT  
**To:** Dana Tulis; Gilberto Irizarry; Debbie Dietrich; Franklin Hill; hitchcock.shane@epa.gov; Al Armendariz; Lawrence Starfield; Gina McCarthy; Steve Page; Sam Coleman; Janet Woodka; Paul Anastas; griffith.bryon@epa.gov; hxfl@cdc.gov; Seth Oster; Bob Perciasepe; Allyn Brooks-LaSure; Kevin Teichman  
**Cc:** terry.carl@epa.gov; wise.allison@epa.gov; gordon.scott@epa.gov; Kenneth Lapierre; kemker.carol@epa.gov; neeley.doug@epa.gov; peyton.mike@epa.gov; quinones.antonio@epa.gov; Danny

France; David Gray; Robert Safay

**Subject:** Potential air impacts of concern from Deepwater Horizon oil spill

Colleagues:

I just got off the phone with Bryon Griffith, Director of EPA's Gulf of Mexico Program, who pointed out to me a concern that I had not anticipated about aerosols from the oil spill as it approaches the tidal zone and landfall. Others have thought this through but I hadn't thought of the spill this way, so I wanted to share this with you and I apologize if this is redundant.

Weather conditions in the Gulf are highly unusual now, with strong, sustained 25 knot winds from the Southeast. As the oil spill approaches land (first the barrier islands in, for example, the Mississippi Sound and then into the Sound itself), Bryon reported that the wave action generated by these winds will have a tendency to produce aerosolization of the oil to a much greater degree than normal, both by the churning of the waves themselves and by the tendency of the wind to shear off the tops of waves.

These conditions can produce inland irritation due to salt spray in normal times. Bryon compared the event we are facing now to a red tide, where such aerosolization can produce respiratory irritation from the red tide organisms.

Bryon reported that already, at Stennis Space Center where the Gulf Program is housed, they are detecting odors which he is confident come from the spill. He reports some concern in the Gulf Region (at least in Mississippi, where he is) that this may increase stress on respiratorily compromised persons (e.g., in hospitals) in the Region. It certainly does validate the desire in the air monitoring plan to increase the monitoring of VOCs as the plan discusses. Bryon was concerned that the potential for effects from this phenomenon had been understated in the response discussions to date.

In addition to continuing to monitor the weather it seemed to me, in thinking about this, that we should consider `1) expanded modeling of the potential extent of such aerosolization under these unusual circumstances; 2) consultation with our public health partners through the Area Command Center or other means to alert them to this possibility and discuss what public health messaging or advisories may be appropriate, and 3) accelerating the VOC monitoring as much as possible, and 4) seeking explicit authorization from the Coast Guard to cover the costs of such monitoring, whether done by us or by State/local government, as a reimbursable expense of the response.

Bryon, if I have missed or mischaracterized any of this, please don't hesitate to correct me!

Stan Meiburg